

## WHAT IS CLAIMED IS:

1. A security door apparatus for an entrance door, etc., in which a locking tool is provided so that the door can be opened and closed to the side end side of a door opening frame, wherein the security door apparatus comprises:

one side end part of an auxiliary door having a predetermined narrow width is connected to the inner side of the open/close side of the door and the other side end part of the auxiliary door is connected to the inner part of the side end of the open/close side of the door opening frame, and the auxiliary door is linked in such a manner that, when the door is opened, the auxiliary door functions as a barrier in the opening part between the door and the door opening frame; and

the auxiliary door has a lattice-shape or louver-shape so that a receiver can visually confirm the outside from the interior.

2. A security door apparatus according to Claim 1, wherein both side end parts of the auxiliary door are rotatably connected to one side end part of the door and one side end part of the door opening frame, respectively, and one side end part of the auxiliary door is slidably provided at one side end part of the door or one side end part of the door opening frame so that one side end part of the auxiliary door can be opened and closed in accordance with the opening and closing of the door.

3. A security door apparatus according to Claim 2, wherein one side end part of the auxiliary door is attachably and detachably provided at one side end part of the door or at one side end part of the door opening frame.
4. A security door apparatus according to Claim 3, wherein one side end part of the auxiliary door of aluminum or iron having a narrow width has axial support parts at the upper and lower parts, whereby these axial support parts are attachably and detachably attached to locking bearing parts that are provided at the upper and lower end parts of the door opening frame or the inner surface of the door, and the axial support parts are formed at the upper and lower parts of the other side end part of the auxiliary door, and these axial support parts provided at the upper and lower parts of the door or the inner surface of the door opening frame are slidably attached to slide guides having a predetermined length.
5. A security door apparatus according to Claim 3, wherein a notch part is provided at the contacting part of the door lock knob of the auxiliary door in order to prevent the auxiliary door from making contact with the door lock knob.
6. A security door apparatus according to Claim 3 or 4, wherein at least the upper half part of the auxiliary door has a lattice-shape or louver-shape structure through which a receiver can confirm the outside.

7. A security door apparatus according to Claim 3 or 4, wherein the auxiliary door is formed to be foldable so that both side end parts of this auxiliary door are rotatably connected to one side end parts of the door and the door opening frame, respectively.
8. A security door apparatus according to Claim 4, wherein one side end part of the auxiliary door is attachably and detachably provided at one side end part of the door or at one side end part of the door opening frame, a width of the auxiliary door is formed slightly larger than the width of a delivered package for a door-to-door delivery, etc., and this auxiliary door partially is provided with openably and closably an opening and closing window through which the package is received.
9. A security door apparatus according to Claim 8, wherein the auxiliary door is provided with the locking tool for locking the locking tool of the door or the locking tool is surrounded by a cover in order to prevent the locking tool of the door from being subjected to lock-picking.
10. A security door apparatus according to Claim 9, wherein the locking tool of the door has at the inner side of the locking part a locking tool for sandwiching the thumbturn part of the locking part to provide a locked status that is slidably or rotatably provided at the auxiliary door.